

May 2014 Regional Climate Summary

For the San Francisco Bay Area and Monterey Bay Area

May 2014 was warm and dry. Numerous daily high temperature records were set or tied during three days in May. This record warmth resulted in average May temperatures being above normal across the entire region. May was the fourth consecutive month in which average temperatures were above normal. Rainfall was scarce in May as the storm track mostly remained well to the north of the area. Over half of all climate stations picked up no measurable rain during May and the majority of those locations that did measure rain accumulated less than 10 percent of their monthly normal.

May Temperatures:

A heat event that began at the end of April lingered into the beginning of May. Several high temperature records were set on Thursday, May 1. A second heat event occurred on May 13 and 14. Ten daily high temperature records were set or tied on Tuesday, May 13. Fourteen more records occurred on Wednesday, May 14. The heat event of May 13 and 14 was notable for a couple of reasons. First, Downtown San Francisco had a high of 90 degrees on May 13, which was the second 90 degree day this spring (the first was April 30). This is noteworthy because there have been only five other years in San Francisco's recorded weather history in which the temperature has reached 90 degrees or warmer on at least two days during the spring months of March, April and May (the most recent year was 2001). San Francisco temperature records date all the way back to 1874 (140 years). The other notable item from the May 13-14 heat event was the high temperature of 100 degrees in Santa Cruz on the 14th. Not only was this 100 degree high a record for the date, but also a record high for the entire month of May in Santa Cruz. In addition, the 100 degree reading in Santa Cruz on May 14 was the earliest day in the year in which Santa Cruz has reached the century mark. The previous record for earliest 100 degree day was June 5 (in 1903). Santa Cruz's temperature records date back to 1893.

May Regional Temperature Summary

Location	Average High	Normal High	Departure from Normal	Average Low	Normal Low	Departure from Normal
North Bay						
Angwin	77.5	73.8	3.7	47.9	47.2	0.7
Calistoga	80.1	78.7	1.4	50.4	46.3	4.1
Cloverdale	85.3	80.3	5.0	51.9	50.2	1.7
Kentfield	77.3	73.5	3.8	51.4	49.0	2.4
Napa	80.8	76.2	4.6	51.4	49.6	1.8
Napa Airport	75.4	72.6	2.8	46.2	45.5	0.7
San Rafael	77.1	70.7	6.4	52.5	50.1	2.4
Sonoma County Airport	80.4	74.5	5.9	47.7	46.4	1.3
Sonoma	77.9	75.9	2.0	48.7	47.1	1.6
San Francisco Peninsula						
Half Moon Bay	66.0	61.1	4.9	48.5	46.8	1.7
Palo Alto	78.1	74.3	3.8	50.5	48.7	1.8
Redwood City	76.2	73.6	2.6	52.2	50.0	2.2
San Francisco Airport	72.0	67.6	4.4	54.9	51.6	3.3
San Francisco Downtown	67.6	64.3	3.3	53.0	51.0	2.0

East Bay						
Antioch	83.6	79.2	4.4	57.0	53.5	3.5
Berkeley	74.0	69.7	4.3	52.1	49.4	2.7
Concord	81.7	77.3	4.4	55.1	52.9	2.2
Concord Airport	80.9	76.3	4.6	53.5	51.7	1.8
Fremont	74.9	71.9	3.0	53.1	51.6	1.5
Hayward Airport	71.2	68.5	2.7	52.7	52.6	0.1
Livermore	81.9	76.9	5.0	51.7	50.2	1.5
Livermore Airport	81.1	75.3	5.8	52.9	49.4	3.5
Mount Diablo Junction	71.7	70.5	1.2	51.4	48.9	2.5
Newark	74.7	70.8	3.9	56.3	53.2	3.1
Oakland	73.3	68.7	4.6	54.6	52.7	1.9
Oakland Airport	72.1	67.7	4.4	54.1	51.1	3.0
South Bay and Santa Cruz County						
Gilroy	81.3	78.7	2.6	50.2	49.3	0.9
Los Gatos	81.2	75.6	5.6	50.5	48.7	1.8
Moffett Federal Airfield	76.2	72.2	4.0	55.1	53.2	1.9
Mount Hamilton	64.4	62.6	1.8	49.3	47.6	1.7
San Jose	77.0	74.3	2.7	53.4	52.4	1.0
Santa Cruz	80.1	71.9	8.2	48.8	48.9	-0.1
Watsonville	76.3	69.2	7.1	50.1	48.9	1.2
Watsonville Airport	75.6	70.0	5.6	49.4	47.6	1.8
Monterey and San Benito Counties						
Carmel Valley	75.5	72.7	2.8	47.0	46.1	0.9
Hollister	79.4	74.5	4.9	50.6	47.7	2.9
King City	81.6	79.2	2.4	48.8	47.1	1.7
Monterey	68.0	63.0	5.0	51.0	48.1	2.9
Monterey Airport	68.3	63.5	4.8	52.8	49.9	2.9
Pinnacles National Park	85.0	79.8	5.2	46.3	43.0	3.3
Salinas	73.4	68.1	5.3	50.0	48.2	1.8
Salinas Airport	71.5	68.4	3.1	51.8	50.3	1.5

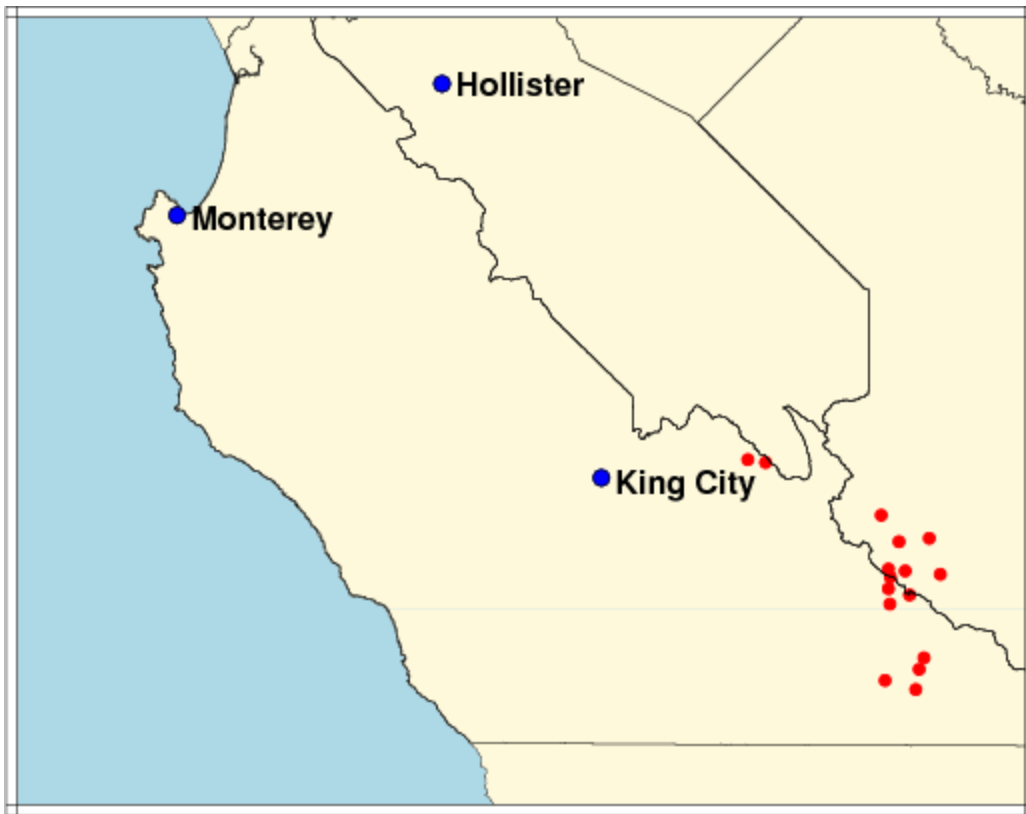
Daily High Temperature Records for May 2014			
Date	Location	Record Max Temp	Previous Record and Year
5/01	San Rafael	91	90 in 1996
5/01	Oakland Museum	89	85 in 1990
5/01	Richmond	89	85 in 2011
5/01	Monterey	88	87 in 1996
5/01	Salinas Airport	90	90 in 1997
5/01	King City	97	94 in 1996
5/13	San Francisco Downtown	90	87 in 1927
5/13	San Francisco Airport	92	90 in 1976
5/13	Oakland Museum	93	93 in 1976
5/13	Oakland Airport	91	88 in 1972
5/13	Richmond	90	88 in 1976
5/13	Moffett Federal Airfield	92	91 in 1976
5/13	Santa Cruz	98	96 in 1927
5/13	Monterey	89	87 in 1976
5/13	Salinas	97	93 in 1976
5/13	Salinas Airport	96	93 in 1976
5/14	San Rafael	94	94 in 1976
5/14	Napa	96	96 in 1976
5/14	Richmond	93	85 in 2006
5/14	San Francisco Downtown	88	87 in 1922
5/14	San Francisco Airport	91	87 in 2006
5/14	Oakland Museum	93	89 in 2006
5/14	Oakland Airport	90	86 in 2008
5/14	Livermore	98	98 in 1972
5/14	Moffett Federal Airfield	91	90 in 2008
5/14	San Jose	94	94 in 1905
5/14	Santa Cruz	100*	92 in 1978
5/14	Monterey	92	80 in 2008
5/14	Salinas Airport	96	85 in 2008
5/14	King City	99	98 in 1972

* Record high for the entire month of May

May Precipitation:

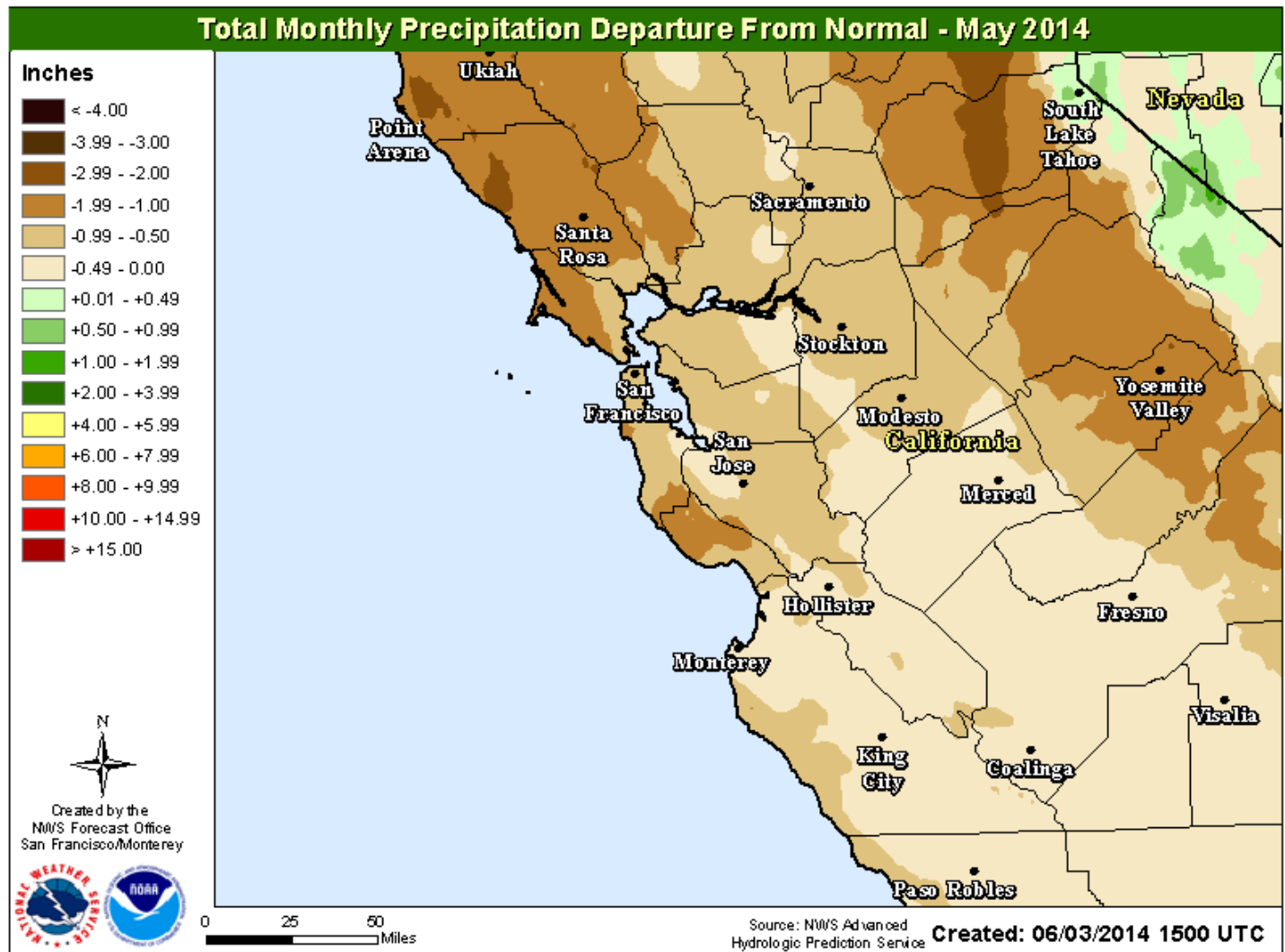
Two precipitation events during May produced only widely scattered light amounts of rain. A weak cold front moved through the region between the evening hours of Thursday May 8 and the early morning hours of Friday May 9. Measurable rain fell at less than half of all reporting locations. A few North Bay locations picked up more than a quarter of an inch. Muir Woods in Marin County accumulated the most rainfall with a half inch. Otherwise rain totals across the region were less than a tenth of an inch.

A second rain event occurred between May 19 and 21 as a weak upper low dropped south into California. Rain with this event fell primarily across portions of Monterey county, and also locally in San Mateo county and southeastern Santa Clara County. Isolated light showers occurred from late evening on Monday May 19 through the early afternoon of Tuesday May 20. Carmel Valley picked up the most precipitation from this event with just over a quarter of an inch. Most climate stations received no measurable rain or only a few hundredths. The upper low began to move off to the east on Wednesday May 21, but not before triggering an isolated thunderstorm over southeastern Monterey County which produced at least ten lightning strikes.



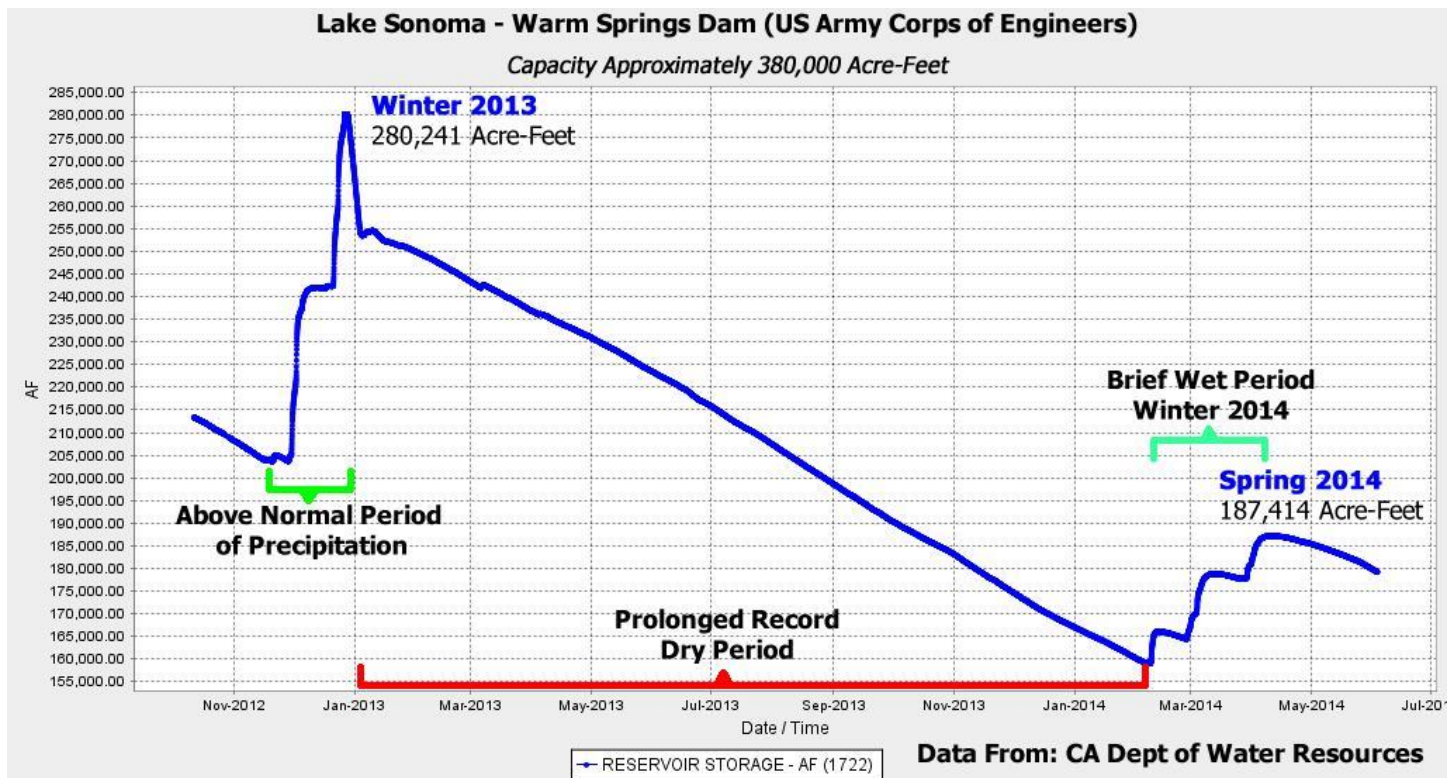
Lightning strikes detected over southeast Monterey County on the afternoon of May 21

Of the 45 climate stations reporting weather information for May, more than half (24) had no measurable rain during the month. Of the 22 climate stations that did report measurable rain, the majority accumulated less than 10 percent of their normal May rainfall. The climate stations that fared best were Carmel Valley with 59 percent of their normal May rainfall and Muir Woods with 36 percent.



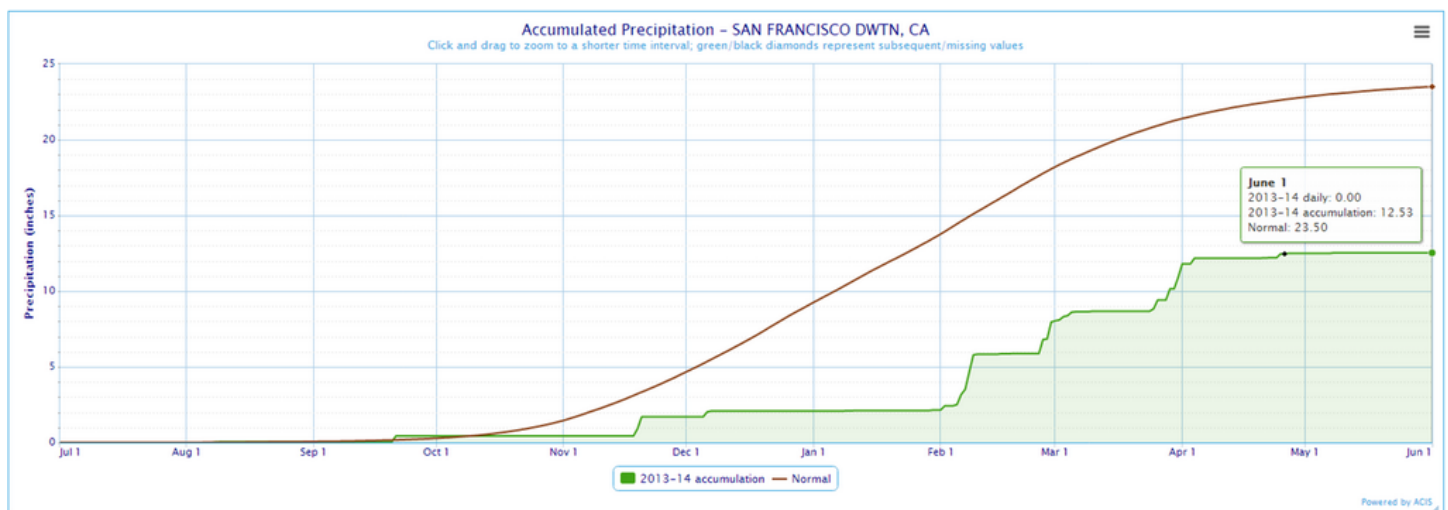
May 2014 Total Monthly Precipitation Departure from Normal (in inches)

By the end of May, 25% of California remained in the “exceptional drought” category, which is the most intense drought classification. The exceptional drought classification included the southern two-thirds of the San Francisco Bay Area and the Entire Monterey Bay Area. Reservoir levels began to fall again after showing some improvement during the brief late winter wet period.



Lake Sonoma reservoir storage between November 2012 and May 2014.

By May 30, year-to-date rain totals for the rain year that began on July 1, 2013 were generally 40 to 55 percent of normal (PON), and as high 60 PON in the East Bay and 70 PON in the North Bay. These PON values had fallen slightly since the end of April.



Downtown San Francisco's accumulated rainfall for the current rain year - July 1, 2013 through June 1, 2014 (green line) compared to normal (brown line).

May Regional Precipitation Summary:

Location	May Rainfall	Normal May Rainfall	Percent of Normal
North Bay			
Angwin	0.00	1.53	0
Calistoga	0.02	1.40	1
Cloverdale	0.00	1.44	0
Kentfield	0.06	1.48	4
Muir Woods	0.50	1.37	36
Napa	0.00	1.03	0
Napa Airport	0.00	0.82	0
Occidental	0.37	2.15	17
San Rafael	0.00	0.89	0
Sonoma County Airport	0.02	1.33	2
Sonoma	0.00	1.06	0
San Francisco Peninsula			
Half Moon Bay	0.05	0.98	5
Palo Alto	0.00	0.48	0
Redwood City	0.00	0.47	0
San Francisco Airport	0.00	0.47	0
San Francisco Downtown	0.03	0.70	4
Woodside	0.05	0.76	7
East Bay			
Antioch	0.00	0.43	0
Berkeley	0.02	0.86	2
Concord	0.00	0.58	0
Concord Airport	0.00	0.54	0
Fremont	0.00	0.49	0
Hayward Airport	0.00	0.55	0
Livermore	0.00	0.48	0
Livermore Airport	0.00	0.62	0
Mount Diablo Junction	0.09	1.06	8
Oakland	0.00	0.77	0
Oakland Airport	0.00	0.68	0
Richmond	0.00	0.75	0
South Bay & Santa Cruz County			
Ben Lomond	0.01	1.23	1
Gilroy	0.00	0.49	0
Los Gatos	0.00	0.54	0
Moffett Federal Airfield	0.00	0.47	0
Mount Hamilton	0.13	1.11	12
San Jose	0.00	0.51	0
Santa Cruz	0.04	0.84	5
Watsonville	0.02	0.60	3
Watsonville Airport	0.03	0.63	5

Monterey and San Benito Counties			
Carmel Valley	0.30	0.51	59
Hollister	0.02	0.40	5
King City	0.00	0.31	0
Monterey	0.13	0.56	23
Monterey Airport	0.09	0.50	18
Pinnacles National Park	0.02	0.52	4
Salinas	0.01	0.45	2
Salinas Airport	0.00	0.35	0

May Winds:



Locally strong winds occurred on occasion during May. These wind events were primarily of the type most common in spring, after passage of a dry cold front when gusty west to northwest winds develop near the coast and through gaps in the coastal mountain ranges. San Francisco Airport (SFO) is typically one of the windiest locations during these spring wind events. On four days during May, the weather station at SFO reported peak wind gusts of around 45 mph, including May 6 (45 mph), May 10 (47 mph), May 18 (46 mph) and May 26 (44 mph). Altamont Pass, another windy location, reported peak wind gusts of 48 mph on May 10 and 55 mph on May 26.

Miscellaneous May Climate Information:

Monthly Ranks for Downtown San Francisco		
Average High Temperature	67.6 deg	13 th warmest May out of 140 years
Average Low Temperature	53.0 deg	13 th warmest May out of 140 years
Precipitation	0.03 in	26 th driest May out of 165 years

Monthly Extremes for Select Locations			
Location	Max Temp: Warmest Day(s)	Min Temp: Coolest Day(s)	Precipitation: Wettest Day(s)
Sonoma County Airport	5/25	5/07	5/05
	96 degrees	42 degrees	0.02 inches
San Francisco	5/13	5/07, 5/31	5/08
	90 degrees	50 degrees	0.03 inches
Livermore Airport	5/14	5/11	n/a
	98 degrees	47 degrees	
San Jose	5/13	5/07, 5/11	n/a
	95 degrees	48 degrees	
Salinas Airport	5/13, 5/14	5/12	n/a
	96 degrees	43 degrees	

Note: This climatological data is preliminary. For official certified climatological data please contact the National Climatic Data Center at 828-271-4800 or <http://www.ncdc.noaa.gov>. Official values as determined at the above web site may take several months for authentication and publication.